A study of Impact of Social Media on learning effectiveness with special reference to Undergraduate students in Delhi/NCR

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SYNOPSIS

Submitted

In partial fulfillment for the award of the Degree of Doctor of Philosophy

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Enrollment No: 2067917 *Roll No 2067003010*

Under the Guidance of

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School of Commerce and Management/ Prof (Dr). Sandeep Kumar/ October 2021

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Introduction

In this progressive era everything is changing at rapid pace, educational is also shifting its progress through content based education with limited topic towards knowledge and application based education. Innovation and effective learning seeks resourcefulness, collaboration and interaction that will not only improvise but add to learners understanding. Class room education is limited by time and communication, it follows one way communication while the essence of learning lies in two way communication and not bounded by time rather and also not limited to place. To help this idea social media plays a vital role, already many people in India are connected with social media. This study will explore the other benefits of social media rather than interaction and networking it carries a tremendous role of boosting learning among people. This platform shares the advantages of collaboration, interaction with two way communication and collaboration or even association using various social media platform

Social Media

Social media has been defined by various authors "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0 and that allow the creation and exchange of user-generated content" (Kaplan & Haenlein, 2010)

Uniquely identifiable profiles that consist of user-supplied content, content provided by other users, and/or system-level data, Publicly articulate connections that can be viewed and traversed by others, "Features that allow users to" consume, produce, and/or interact with streams of user generated content provided by their connections on the site. (Ellison, Steinfield, & Lampe, 2007)

Social media employ mobile and web-based technologies to create highly interactive platforms via which individuals and communities share, co-create, discuss, and modify user-generated content. (Kietzmann, Hermkens, McCarthy, & Silvestre, 2011)

Social media can be defined as "collaborative online applications and technologies which enable and encourage participation, conversation, openness, creation and socialization amongst a community of users". (Panahi, Watson, & Partridge, 2012)

Different Types of Social Media

(Andreas M. Kaplan, 2010)	(Alwagait, Shahzad, & Alim, 2015)	(Reuben, 2008)	(Rowlands, Nicholas, Russell, Canty, & Watkinson, 2011)
Collaborative projects, blogs, content communities, social networking sites, virtual game worlds, and virtual social worlds.	Social networking sites (SNS), Bookmarking sites Micro blogging sites, Media sharing sites, Social news sites, Blogs and forums.	Ten categories in his "Social Media Landscape": publication tools, sharing tools, discussion tools, social networks, micro publication tools, social aggregation tools, livecast, virtual worlds, social gaming and massively multiplayer online gaming (MMO).	Collaborative authoring, Conferencing, Scheduling and meeting tools, Social networking, Image or video sharing, Blogging, Micro blogging, Social tagging and bookmarking

Media Theories

- **Social Responsibility Theory**: (It's an upgraded version of free press theory which sets greater accountability of the media especially the one who is broadcasting to the society)

- **Authoritarian theory** (With this theory all media and press falls under the supervision of ruling party)

- **Free Press Theory** (Media is free and have complete freedom regarding public expression and economic expression)

- **Development media theory** (takes various forms but essentially proposes that media freedom, while desirable, should be subordinated (of necessity) to the requirements of economic, social and political development)

- **Alternative media theory** (a Liberal model in which the media operate according to the principles of the free market; without formal connections between media and politics and with minimal state intervention.

- **A Democratic Corporatist model** in which commercial media coexist with media tied to organized social and political groups and the state has a small but active role**.**

- **A Polarized Pluralist model,** with media integrated into party politics, weaker commercial media and a strong role for the state

. (Ngai, Tao, & Moon, 2015)

Usage of Social Media

Pastime, affection, fashion, share problems, sociability, social information, instant messing, other agencies like government (Ex. interact with public), companies (Ex. marketing their product), Institutions (Ex. for hiring, admission, information share etc), politicians, Individuals (collaboration, information, support etc.).

(Quan-Haase & Young, 2010)

Learning

Learning refers to learning as a change in behavior that is due to experience. Learning is defined as an effect of experience on behavior. (de Houwer, Barnes-Holmes, & Moors, 2013)

Change in behavior potential rather than, or in addition to, change in behavior Learning is the process by which a relatively stable modification in stimulus-response relations is developed as a consequence of functional environmental interaction via the senses. (Anderson, Douglass, & Qin, 2006)

Types of Learning

Motor learning, Verbal learning, Concept learning, Discrimination learning, Learning of principles, Problem solving, Attitude learning.

Learning Models

1. Contextual Learning Model Knowledge and skills gained from the efforts of students to construct their own knowledge and skills as students learn.

2. Cooperative Learning Model Small group of students to work together in maximizing the learning conditions for achieving learning objectives.

3. Quantum Learning Model Quantum learning model is an assembly of various theories or views of cognitive psychology and neurology that much programming already exists. 4. Integrated Learning Model An integrated learning model of learning that allows students both individually and in groups of actively searching, digging, and found the concepts and principles of holistic. Learning is a model that tried to integrate several subjects.

5. Model Problem Based Learning (PBL) Enabling teachers themselves as mentors and facilitators so that students can learn to think and solve their own problems.

Theories of Learning

Classical conditioning, Operant Conditioning, Learning by Insight, Learning by Imitation

Factors Affecting Learning

- Perceived usefulness and perceived ease of use, flexibility of e-Learning, interaction with class participants, student usage, and gender

Maturity, motivation, technology comfort, technology attitudes, computer anxiety, and epistemic beliefs, technology control, technology attitudes, teaching styles, self-efficacy, availability, objectivist and constructivist, quality, reliability, and availability, pace, sequence, control, factual knowledge, procedural knowledge, conceptual knowledge, timing, frequency, and quality.

- Students' temperaments (guardian, idealist, artisan, and rational)
- Perceived flexibility of the medium, perceived usefulness and perceived ease of use, media variety, prior instructor experience, virtual immediacy behaviors, and interaction.
- Perceived usefulness and perceived ease of use, perceived flexibility.

Computer Supported Collaborative Learning

Computer supported c collaborative learning develops higher level thinking skills; stimulates critical thinking; helps students clarify ideas through discussion and debate; enhances skill building and practice; develops oral communication skills; fosters metacognition in students; and improves students' recall of text content through cooperative discussions. (Kanselaar, Erkens, Jaspers, & Schijf, 2001)

Web 2.0 Learning

With the emergence of Web 2.0 technologies into the everyday life of students, it is important to explore faculty use of Web 2.0 technologies to support teaching and learning in higher education. The purpose of this study was to assess faculty's awareness of the potential of Web 2.0 technologies to supplement the classroom learning. (Bosch, 2009) (Ajjan & Hartshorne, 2008)(Dabbagh & Kitsantas, 2012)

Social Capital and Online Learning Social capital is an intangible asset produced by social relationships as a result of social networking. Social capital as powered by media-based human interactions enables us to measure and manage online learning interactions to improve knowledge construction in collaborative online learning. (Lu, Yang, & Yu, 2013)

Interaction in Social Media Learning

Interaction in social media learning is a tool or platform that supports or facilitates communication, collaboration, designing technology-mediated social participation and interaction among participative members. (Jung, Choi, Lim, & Leem, 2002) (Zhao, Liu, Tang, & Zhu, 2013)

Social Media Resourcefulness for Learning

Resourcefulness can be best defined in the above context as "It is the path that mediated by initiative. Persistence was modeled or constructed as the desired effect. It asserts to be the defining characteristic of learning. (Ponton, Gail Derrick, & Carr, 2005)

Social Media and Collaboration

Social media and collaboration enhancing learners' knowledge though exchanging right information, innovating and altering activities, sharing content and resources, enhancing learners capability. It must be helpful in achieving common purposes. (METZGER et al., 1993)

Social Media and Learning Effectiveness

The degree to which learning effectiveness have been achieved throughout the process of learners interest in acquiring knowledge. (Wang, 2014)

Personal and Professional Learning through Social Media

Innovative education systems of personal and professional learning through social media networks are able to integrate learners, mentors, and evaluators within and outside of institutions. (Roberts, 2011)

Challenges of Social Media Learning

Learning through social media has few challenges such as unfamiliarity with the tools, information overload, distraction, and prevailing lurking behaviors'. (Manca & Ranieri, 2016)

Opportunities of Social Media Learning

Enhanced communication between students and instructors, increased opportunities for networking or collaborations among students, rapid sharing of resources, access to course

materials by students after class, provision of an alternative platform to the official learning management systems, exposure of students to technologies and skills. (Lau, 2017)

Statement of Problem

Large numbers of people are using social media and use it for social interactions. It is a digital medium where interaction is possible individuals and in groups also. Prime purpose of using social media is to share information, interaction and entertainment. Ease of use social media makes this platform more important for knowledge share, exporter interaction, learning new skill, interacting with experts of domain, collaboration for learning etc.

The research perspectives may be categorized broadly into three- social media as a new form of learning resources, social media as a knowledge sharing & learning collaboration and social media usage & self determination to enhance learning.

A study of social media and use of social media for learning purpose will helpful in understanding the learning effectiveness of the users. Study will help in understanding the impact of social media as a new information technology and its usage for self-deterministic learning purposes. It will examine and measure the use of social media, collaboration for learning, intention to use social media, self determination to use social media and its impact on learning effectiveness of professional students in India.

Professional Education in India

According to the CARE LTD. (2017) the market size of Indian education sector is approx Rs. 2,230 bn in 2017 and expected to reach at Rs. 3,100 bn in three years, large numbers of students are enrolling in professional educations in India, variety of new courses and disciplines are opening in India, women related courses are getting popularity in India. In 2017 approx 1,266.9 mn students are in education in India. It is expected to reach at 1,326.1 mn students in coming three years.

There is sharp rise in use of information technology in education. Use of information technology in education sector is not limited to hardware and software use only, in education ICT is being use of course and content development, increase use of web based

content based repositories', creation of interactive forums tough the internet formally and informally, use of satellite communication system to enhance learning.

Need for the Study

There is 560 million active internet users in India (2019) and significant users are active on Social Media. Average data consumption till 2019 is 8.3 GB per month. 1.2 billion Mobile phones and more than 12 billion apps till 2018. India has highest number of Facebook users in the world, 269 million Facebook, 62 million LinkedIn, 265 million YouTube and 7.6 million Twitter users are in India till 2019. Two third of the internet users are of 12 to 29 years age group in India. Two in three Indians who have smart phones are using social media. Government's Digital India initiate is bringing broadband internet access to every educational institution. Self-learning MOOCs courses, webinars and other digital learning platforms are also being promoted by government. Information acquiring is the second most important reason on using social media in the world. It is common to use social media for information and learning purpose. Social media has tremendous potential to enhance learning.

Literature Review

For the understanding the various factors leading to social media use for learning purpose and its effectiveness of students of undergraduate education in India, we have reviewed literature in respective areas to enhance theoretical understanding of social media use for learning. Here, we will examine the literature on social media learning and digital learning. We will also highlight the factors influence social media learning. We will also highlight various theories used in social media learning.

The proposed research will consider the theories on constructivism theory of learning, TAM and self-determination theory of motivation as basis for understand the use of social media and its learning or academic effectiveness by the students of undergraduate educational in India.

Constructivism Theory- Learning-Online Learning-Social Media Learning

The concept of constructivism first incorporated in the use of advance organizers in the learning and retention (Ausubel, 1960). Learner is fully aware with the learning process and has sense of knowledge required; learners understanding for acquiring new knowledge

is based upon prior experience, existing knowledge, his/her beliefs, view and way thinking and contextual influence of learning (Baldwin, 2019).

Technology Acceptance Model (TAM)-Online Learning-Social Media Learning (Davis, 1989):

Most accepted and popular model of using information technology by human is Technology Acceptance Model (TAM). It explains the users' intention to sue information technology to learning purpose; it is also relevant in the field of social media learning. Intention to use information technology (Davis, 1989).

Self-Determination Theory-Learning-Online Learning-Social Media Learning

Self Determination Theory (SDT) of motivation has important role in overall enhancement of learner's motivation towards learning experience, it enable learner's psychological need which is important for online based virtual reality learning and human interaction (Huang, Backman, & Backman, 2018). Self-determination theory is a theory which is based on human motivational and development oriented view point. This theory focus on psychological need of human being (Deci & Ryan, 2008).

Research Gap

The research is still evolving and not many empirical papers are identified by the review papers and previous researches. (Alalwan et al., 2019) in a review paper have made the following observations regarding the status of research on social media use for learning purpose. Focus primarily on western countries, ignoring other regions large on fast growing social media usage for learning purpose in education of India after the internet revolution. Cheap data, availability of information communication devices & mobile phones and high speed broadband stimulates large number of people mostly youth to use social media. Youth are using social media for information getting, clearing doubts, learning though online sources, clearing doubts and taking supports from experts. So, there is great scope of study on use of social media and its learning effectiveness from academic point of view. This study is therefore exploratory and analytical in nature. The proposed research will look examine the use of social media for learning purpose in education

Proposed Research

Undergraduate students those pursuing education in India need learning resource that can provide knowledge beyond time and place bound, beyond from class social media has potential to deliver information. Social Media has potential to enhance student's learning effectiveness. It is suggested by (Alalwan et al., 2019) relevant framework for studying social media and understands the use of social media for educational purposes. In social media learning users are responsible for selecting the specific media for obtaining learning. Critics say social media distract students form learning, it is also true that large number of youths on social media using it for information gathering and learning purpose. Previous research (Bolton et al., 2013) highlighted that the six reason of using social media contributing, sharing, consuming, searching, participating and playing. There is another research on social media identified other ten aspect of using social media such as: social interaction, information seeking, passing time, entertainment, relaxing, expression of opinions, communication utility, convenience utility, information sharing, surveillance or knowledge about others. (Whiting & Williams, 2013) This necessitates a study on the use of social media for various contexts to identify the preferred use of social media for learning purposes and its effectiveness. A likert scale will be developed on use of social media to measure learning effectiveness of undergraduate students in Delhi NCR region. Three uses of social media for learning effectiveness may be considered by students of undergraduate education are considered for proposed study: Professionalism Learning, Approachable to Task Learning and Performance to Task Learning. (Harden, Crosby, & Davis, 1999)

To study the "social media use and learning effectiveness of undergraduate educational students in Delhi-NCR region" will be studied using the theories of

a. Constructivism Theory of Learning

b. Technology Acceptance Model

c. Self Determination Theory of Motivation

d. Learning effectiveness

The prime purpose of using is social networking and has various distractions; it needs self-awareness and attentiveness to use social media for learning purpose. The students of undergraduate education are aware enough the pros and cons of use of social media.

Research Objectives

To identify the various categories of social media usage for learning in undergraduate education, it also examines how social media is being used for learning purpose & its academic learning effectiveness.

- To identify the impact of collaboration for learning on students' learning effectiveness.
- To identify the impact of intention to use social media on students' learning effectiveness.
- To identify the impact of self-determination/self-motivation on students' learning effectiveness.

Research Hypotheses

H0: Social Media impacts learning effectiveness of undergraduate students

H1: Social Media does not Impacts learning effectiveness of undergraduate students

Research Methodology

The proposed research is cross sectional and exploratory in nature. The methodology will use in this study for testing the proposed hypotheses through quantitative methods. For model testing we will go through pre-test and pilot study followed by measures for CMV (Common Method Variance), CMV is a bias arises when same method or single source were using to measure both the independent and dependent variables within the relationships. Finally the data will collected and Structural Equation Modeling (SEM) technique will use. Prescribed software such as SPSS will be used for data analysis, it will decide on later stage. The institutions offering undergraduate education in Delhi/NCR may be classified based on the institution type: Government and Private. Respondents were classified based on the course they are doing: Under Graduate (PG) and Research Scholars (RS). The location of the educational institution may be classified in Delhi-NCR region. Thus we arrive at a 2x2 factorial design for our data collection. At least 400 respondents

The participants of this study are students of undergraduate educational institutions in Delhi-NCR region. The purposive sampling will be used for selection of the institutions

and individual respondents in the institutions are selected through convenience sampling. All the respondents will be registered in various discipline of undergraduate education in Delhi-NCR region. The data collection will be done used structured questionnaire administered personally and through the internet. Internet based and Google form questionnaire will be used.

Scope of the Study

The proposed research looks at the learning effectiveness of students of undergraduate education in Delhi-NCR region i.e. Professionalism Learning, Approachable to Task Learning and Performance to Task Learning. The proposed research will measure the respective learning effectiveness through the use of social media as a source of learning apart from academic learning. The scope of study is limited to undergraduate educational institute. It is limited to six social media alternatives Facebook, Twitter, LinkedIn, YouTube, Researchgate and Google Scholar. The proposed study is restricted to examining the affinity for social media and learning effectiveness for homogeneous respondents group of students of Undergraduate-education in Delhi-NCR region.

Proposed Chapterization

The thesis will be divided into five chapters:

Chapter I – Introduction

Chapter II – Social Media and Undergraduate Education

Chapter III – Research Methodology

Chapter IV – Analysis and Findings

Chapter V – Conclusion and suggestions for further research

Tentative Schedule of Work As per the directions of the RDC

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